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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,640	03/10/2004	D. Ryan Breese	88-2071A	4212
24114	7590	10/16/2006	EXAMINER	
LYONDELL CHEMICAL COMPANY 3801 WEST CHESTER PIKE NEWTOWN SQUARE, PA 19073				WOLLSCHLAGER, JEFFREY MICHAEL
ART UNIT		PAPER NUMBER		
				1732

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/797,640	BREESE, D. RYAN	
	Examiner	Art Unit	
	Jeff Wollschlager	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 08 August 2006.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) \_\_\_\_\_ is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) 1-14 are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

Claims 1-14 are pending.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5 is indefinite because the recitation "cause the film delaminating" is unclear as to its limiting effect. For the purposes of examination the recitation is understood to mean the film is caused to delaminate.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Bader et al. (WO 95/15256; published June 8, 1995).

Regarding claim 1, Bader et al. teach a method comprising orienting a multilayer film in the machine direction followed by orienting in the biaxial direction at a draw-down

ratio necessarily effective to give the film a dart drop strength that increases with increasing draw down ratio, wherein the film comprises at least one layer of a liner low density polyethylene (LLDPE) and at least one layer of a high density (HDPE) or a medium density polyethylene (MDPE) (page 10, lines 13-16; page 11, lines 25-27; page 12, lines 9-12).

As to claims 2-4 the examiner notes that all of these claimed ranges comprise the essentially accepted industry definitions of the terms: LLDPE, HDPE, MDPE. As such, references claiming LLDPE, HDPE, and MDPE disclose the broadly claimed ranges of density.

As to claims 5 and 6, Bader al. discloses that employment of HDPE reduces splittiness/delamination of the film (page 10, lines 12-16). The clear disclosure is that there is some degree of splittiness. Further, Bader et al. teach the same claimed manipulative steps and employ the same claimed materials. As such, Bader et al. achieves the same claimed effect.

As to claims 13 and 14, Bader et al. produces the same claimed products through employment of the same claimed method.

Claims 1-6, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Davis (U.S. Patent 6,419,966; issued July 16, 2002).

Regarding claim 1, Davis teaches a method comprising orienting a multilayer film in the machine direction at a draw-down ratio necessarily effective to give the film a dart drop strength that increases with increasing draw down ratio, wherein the film

comprises at least one layer of a liner low density polyethylene (LLDPE) and at least one layer of a high density (HDPE) or a medium density polyethylene (MDPE) (col. 2, lines 35-60; col. 3, lines 24-29; col. 4, lines 1-17; and 24-29; col. 10, lines 57-66).

As to claims 2-4 the examiner notes that all of these claimed ranges constitute the essentially accepted industry definitions of the terms: LLDPE, HDPE, MDPE. As such, references claiming LLDPE, HDPE, and MDPE disclose the broadly claimed ranges of density.

As to claims 5 and 6, Davis discloses splitting/delaminating of the film (col. 1, lines 44-45). The clear disclosure is that there is some degree of splittiness typical in the production of films. The claim as presented does not distinguish over the prior art. Further, Davis teaches the same claimed manipulative steps and employs the same claimed materials. As such, Davis achieves the same claimed effect.

As to claims 13 and 14, Davis produces the same claimed products through employment of the same claimed method.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bader et al. (WO 95/15256; published June 8, 1995), as applied to claims 1-6, 13 and 14 above.

As to claims 7-12, Bader et al. employ LLDPE, HDPE, and MDPE. Bader et al. do not disclose broad ranges of applicable molecular weights. However, the claimed ranges are readily available in various commercially available polyethylene products and would have been obvious choices for employment by the ordinarily skilled artisan at the time of the claimed invention for the purpose of being able to produce a film without necessarily needing to produce the raw material polymer.

Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, (U.S. Patent 6,419,966; issued July 16, 2002), as applied to claims 1-6, 13 and 14 above.

As to claims 7-12, Davis employs LLDPE, HDPE and MDPE. Davis does not disclose broad ranges of applicable molecular weights. However, the claimed ranges are readily available in various commercially available polyethylene products and would have been obvious choices for employment by the ordinarily skilled artisan at the time of the claimed invention for the purpose of being able to produce a film without necessarily needing to produce the raw material polymer.

***Response to Arguments***

Applicant's arguments filed August 8, 2006 have been fully considered but they are not persuasive regarding the Bader et al. reference. However, the examiner agrees that the Gonioukh et al. reference is of limited value in determining the patentability of the currently pending claims and does not provide data clearly demonstrating an increase in dart drop strength as draw-down ratio increases. However, the examiner notes that Gonioukh et al. does demonstrate that more variables than just draw-down ratio impact the dart drop strength (e.g. properties of the raw material, catalyst and manufacturing method of producing the material, and the film processing conditions). The 103(a) rejection of the claims over Bader in view of Gonioukh et al. is accordingly withdrawn.

Applicant's arguments regarding the Bader et al. reference appear to be on the following grounds:

1. Bader et al. create a biaxially oriented film (machine direction and transverse direction) and as such do not teach machine direction orientation.

Applicant's arguments are not persuasive for the following reasons:

1. Claim 1 recites, "comprising orienting a multilayer film in the machine direction." Bader et al. meets this limitation in two ways. First, it is noted that Bader et al. orients his multilayer film in the machine direction first and then orients it in the biaxial direction (page 12, lines 8-12). Second, the claim does not exclude orienting the film in the biaxial direction. Therefore, Bader et al. performs the same manipulative

steps with the same materials. As such, absent evidence showing Bader et al. do not create a product that increases in dart-drop strength with increasing draw-down ratio it is the examiner's position that Bader et al. would inherently achieve the claimed effect.

***Conclusion***

All claims are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JW

Jeff Wollschlager  
Examiner  
Art Unit 1732

Christina Johnson  
CHRISTINA JOHNSON  
PRIMARY EXAMINER  
10/12/06

October 7, 2006